

REMARKS

Claims 1-17 have been canceled without prejudice.

New claims 18-24 have been added. Support for new claims 18-24 can be found in previous claims 1, 4-10, 11-15 and 17 as well as page 20, lines 13-14, page 22, lines 15-17, page 24, lines 18-25, page 31, lines 2-7, page 37, lines 1-4, page 40, lines 3-10, and page 46, lines 18-21.

Upon entry of the Amendment, claims 18-24 will be pending.

Claims 1, 4-10, 11-15 and 17 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yokouchi et al. (U.S. Patent 5,840,066) in view of Heimann et al. (U.S. Patent 6,010,984).

Claims 1-17 have been canceled, which renders the foregoing rejection moot.

The present application is a continuation application of prior U.S. Application No. 09/254,172, filed March 2, 1999, which is a 371 of PCT/JP98/02891 filed June 26, 1998. Therefore, Yokouchi et al. is only available as § 102(e) prior art against the present claims.

As set forth in 35 U.S.C. § 103(c), subject matter developed by another person, which qualifies as prior art only under subsections (e), (f), and (g) of section 102 shall not preclude patentability under section 103 where the prior art subject matter and the claimed invention were at the time the invention was made, subject to an obligation of assignment to the same person. The undersigned states that the present invention and Yokouchi et al. were commonly owned at the time that the present invention was made. Thus, Yokouchi et al. has been disqualified for use as prior art in an obviousness rejection under § 103(c). However, Applicants advise that

Yokouchi et al. claims priority from JP 7-348520 (one of two priority documents) laid open as JP-A-9-169989 on June 30, 1997.

Additionally, claims 18-24 would not be obvious over Yokouchi et al. and Heimann et al. at least for the reasons submitted in the Amendment under 37 C.F.R. § 1.114(c) filed July 19, 2006. Furthermore, while Heimann et al. disclose a grease or gel composition comprising a base oil, a thickener and additives, such as amines, Heimann et al. do not disclose or suggest a grease composition comprising a pH adjustor selected from the specific amine compounds, organic acid metal salts and an alkaline inorganic substances as defined in new claims 18-24.

The present invention relates to a rolling bearing and particularly a rolling bearing which is used under such a condition that water may seep in the lubricant or the bearing is affected by high temperature, high-speed rotation or vibrations.

Rolling bearings which are used under conditions that water may seep into the lubricant include those for a work roll and a rolling mill for iron and steel materials. Other rolling bearing that suffer from water incorporation into the lubricant are those used for electric parts and accessories of an automobile engine. These bearings are subject to invasion by muddy water or rainwater splashed up from a road, and the water pump bearing is subject to invasion by circulating water for engine cooling.

It is generally known that the incorporation of water into the lubricant of a rolling bearing results in great reduction and durability of the rolling bearing. Conventional bearings have so far been protected against water seeping into the lubricant of the bearing by fitting a contact rubber seal to the chock in which the bearing is put so that a large amount of rolling water may be

prevented from seeping into the chock. However, in case the contact rubber seal undergoes deterioration or damage, water can still seep into the chock and then into the lubricant of the bearing.

In view of the above-noted problems of the prior art, an object of the present invention is to provide a rolling bearing which secures a sufficient bearing life easily and economically even when used under such conditions that outside water or water of moisture condensation may seep into the lubricant or the bearing as influenced by vibrations. This object is achieved by the invention described in claims 18-24.

Neither Yokouchi et al. or Heimann et al. disclose or suggest the problems of the prior art or the solution provided by the present invention.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the obviousness rejection over Yokouchi et al in view of Heimann et al.

Claims 1, 4-10, 11-15 and 17 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Naka et al. in view of Heimann et al. and Yokouchi et al.

Claims 1-17 have been canceled. which renders the rejection moot.

The present application is a continuation application of prior U.S. Application No. 09/254,172, filed March 2, 1999, which is a 371 of PCT/JP98/02891 filed June 26, 1998. Therefore, Yokouchi et al. is only § 102(e) prior art to the present application.

Furthermore, as noted above, Yokouchi et al. has been disqualified for use in an obviousness rejection pursuant to § 103(c).

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Supplemental Amendment under 37 C.F.R. § 1.114(c)

Additionally, Applicants submit that claims 18-24 would not be obvious over Naka et al. in view of Heimann et al. and Yokouchi et al. at least for the reasons submitted in the Amendment under 37 C.F.R. § 1.114(c) filed July 19, 2006. Furthermore, Heimann et al. disclose a grease or gel composition comprising a base oil, a thickener and additives, such as amines, but Heimann et al. do not disclose or suggest a grease composition comprising a pH adjustor selected from the specific amine compounds, organic acid metal salts and an alkaline inorganic substances as defined in new claims 18-24.

Further, as discussed above with respect to the previous rejection, none of Naka et al., Heimann et al., or Yokouchi et al. disclose or suggest the object achieved by the present invention.

For the above reasons, it is respectfully submitted that the claims presented herein are patentable over Naka et al in view of Heimann et al and Yokouchi et al, and withdrawal of the foregoing rejection under 35 U.S.C. § 103(a) is respectfully requested.

Claims 13-15 and 17 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claim 13 was amended in the Amendment under 37 C.F.R. § 1.114(c) filed July 19, 2006 to overcome the rejection under 35 U.S.C. § 112, second paragraph. Even if this amendment did not overcome the § 112, second paragraph rejection, claim 13 has been canceled, which renders the rejection moot.

Withdrawal of all rejections and the allowance of claims 18-24 is earnestly solicited.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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